REMARKS

This Response is submitted in reply to the Office Action dated January 16, 2004. Claims 1-13, 15-28 and 30-35 are pending in the patent application. Claims 14 and 29 have been withdrawn. Claims 1, 6, 7, 9, 10, 12, 15, 17, 22, 26, 27, 28, 30 and 31 have been amended for clarification purposes only and not for any reasons of patentability. No new matter has been added by these amendments. Claims 1-13, 15-28 and 30-35 were objected to; and Claim 1-13, 15-28 and 30-35 were rejected under 35 U.S.C. §102(e). Applicants respectfully submit, for the reasons set forth below, that the objections and rejections have been overcome or are improper. Accordingly, Applicants respectfully request reconsideration of the patentability of claims 1-13, 15-28 and 30-35.

Claims 1-13, 15-28 and 30-35 were objected to based on informalities. The Patent Office stated that the term "stationarily" found in certain of the claims should be changed to "stationary." Applicants have amended the claims including to overcome this objection. Applicants therefore respectfully request that the objection to claims 1-13, 15-28 and 30-35 be withdrawn.

Claims 1-13, 15-28 and 30-35 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,215,498 to Filo et al. ("*Filo*"). Applicants respectfully disagree with the Patent Office and submit that *Filo* does not disclose all of the elements of claims 1-13, 15-28 and 30-35.

The claimed invention is directed to an information input/output system and an information input/output method which enables a users to easily and quickly transfer information from one computer to another computer, from a computer to a printer or any other transfer of information between similar devices by expanding the digital space of a computer into the real world. For example, an image of a computer display screen may be projected onto a wall or other surface in a room using a projector. The projected image now is part of the local space of the computer (i.e, displayed on the computer screen) and an object in the real world such as a computer image being displayed on a table top or wall. (see the Specification, page 9, lines 4 to 10). Accordingly, a user can handle information three-dimensionally making use of the positional relationship of various objects in the real world without having to remember or pay attention to the location addresses or identification numbers for the individual objects on the computers. Accordingly, the entire room where the computer is placed can be used as part of the

computer display to handle and transfer different objects such as files from the computer to physical devices or surfaces in a room such as a table top, wall or display screen. (see the Specification, page 10, lines 5 to 12).

In one embodiment, the claimed system includes one or more operation surfaces arranged in an information space such as a conference room where the operation surfaces may be any suitable surfaces such as table tops, walls or other areas in the room. See the Specification, page 43, lines 1 to 10). The claimed system also includes display means such as projectors 13 and 14 shown in Figure 5. The projectors 13 and 14 display an image on one or more of the operation surfaces. Additionally, the system includes imaging means such as projectors 18 and 19 shown at Fig. 5, for picking up an image displayed on the operation surfaces.

The system includes one or more physical objects that are mounted on the operation surfaces which contain visually identical visual marks on those surfaces. A stationary environment type computer is arranged in the information space and is adapted to or is operable to perform a processing operation of recognizing the identification information and the position information of each of the physical objects, a processing operation of recognizing the digital object dropped to a site on the surface of one of the physical objects and a processing operation of forming link information from linking the digital object to the drop site on the surface for each of the physical objects. Applicants respectfully submit that *Filo* does not disclose all of the elements of the claimed invention.

Filo discloses a virtual command post that includes a system of network terminal apparatus for creating a three-dimensional animated work environment where users are depicted as avatars in the virtual work environment. The actions and information of the user is inputted into the virtual work environment through their corresponding avatars in order to perform "complimentary, independent and cooperative tasks in parallel to create simultaneous sets of solutions to problems relating to command, control, communications, cognition and intelligence." (see the Abstract). In the preferred embodiment, the virtual work environment simulates an actual military command post. The users enter this environment by virtual reality displays including audio and video and inputs such as a microphones, body encoders and pointing devices. The user manipulates the avatars to interact with one another in the virtual environment while being able to select and manipulate functional objects displayed in the virtual work environment. For example, a user may be provided with a fingerless glove or gloves 44

where the virtual gloves include a hand tracker 46 that tracks the movement of the users hands and shows that movement in the virtual environment. The user may also be provided with a head tracker 38 which attracts the movement of the player's head and translate that movement into the virtual environment.

The virtual environment includes several different functional object such as avatars or icons representing staff-level users or functionally non-human entities such as "intelligent agents." (see Col. 10, lines 4 to 35). Some of the functionally objects include display buttons such as projection icons which may be selected to project images and information onto video walls and projection screens displayed in various work areas or rooms of the "virtual environment." Thus, *Filo* is directed to a virtual environment where players or users interact with other players or user via avatars displayed in the virtual environment. *Filo* therefore discloses or teaches user interaction in a virtual environment such as a computer network environment and not in a physical environment such as a conference room as in the claimed invention.

Therefore, *Filo* does not disclose one or more operation surfaces in an information space. Applicants also submit that *Filo* does not disclose, teach or suggest display means for displaying an image on the operation surfaces or an imaging means for picking up an image on operation surfaces as in the claimed invention. As described above, *Filo* discloses a virtual command post that virtually displays the command post in a virtual environment. *Filo* does not disclose, teach or suggest displaying any information on operation surfaces in a physical or real world environment. Furthermore, *Filo* does not disclose a computer that is operable to recognize an identification information and position information of physical objects based on visual marks associated with the objects, recognize digital objects dropped onto the surface of physical objects and form a link for linking the digital objects to the drop surface or surfaces for each of the physical objects as in the claimed invention.

For at least these reasons, *Filo* does not disclose, teach or suggest all of the elements of the claimed invention. Accordingly, Claims 1, 6, 9, 12, 15, 17, 22, 26, 27, 28, 29 and 31 and claims 2-5, 7-8, 10-11, 13, 16, 18-21, 23-25 and 32-35 which depend from these claims, are each patentably distinguished from *Filo* and are in condition for allowance.

In light of the above, Applicants respectfully submit that claims 1-13, 15-28 and 30-35 are patentable over the art of record because *Filo* does not disclose all of the elements of these

claims. Accordingly, Applicants respectfully request that claims 1-13, 15-28 and 30-35 be deemed allowable at this time and that a timely Notice of Allowance be issued in this case.

No fees are due in this case. If any other fees are due in connection with this application as a whole, the Patent Office is authorized to deduct the fees from Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. (112857-251) on the account statement.

Respectfully submitted,

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